

**REMARKS**

Claims 1-23 are pending in the application, claims 9-15 are withdrawn from consideration and claims 1-8 and 16-23 stand rejected.

**Claim Rejections - 35 U.S.C. § 102**

The Examiner rejected claims 1 and 18 under § 102(b) as being unpatentable over Goeb et al. (US 5,688,573).

Claim 1 recites, *inter alia*, a resin film layer for protecting the front face on the front face.

In the Amendment filed July 16, 2007, Applicants submitted that the Examiner's correlation of top layer 10 to a resin film for protecting the front face was improper. In particular, because the top layer 10 corresponds to a coloring layer used to create the letters in Goeb, the top layer 10 does not correspond to a protective layer, but to the contrary, corresponds to a coloring layer. (*See* FIGS. 7 -10; col. 8, lines 1-37).

In the response to arguments section of this Office Action, the Examiner replies that top "layer 10 inherently provides the functional limitation of protecting the front face by its position as the outermost layer." (*Office Action*, p. 9) The Examiner's premise is based on the assumption that coloring layers may provide the function of protecting, and thus, fall within the scope of the claim language. (*Id.*)

In response, Applicants submit that in contrast to the Examiner's assertion, the top layer 10 fails to disclose wear-resistant properties since the top layer 10 contains a pigment for coloring the layer 10. Furthermore, the lower layer would be exposed when the top layer 10 is subject to damage. Consequently, letters, figures, or the like on the lower layer cannot be

protected. To the contrary, if the protective layer of the present invention as recited in claim 1 is subject to damage, the colored layer containing the pigment will not deteriorate its appearance.

Thus, Applicants submit claim 1 is patentably distinguishable over Goeb for at least this reason.

Regarding claim 18, Applicants respectfully submit Goeb fails to disclose “wherein the resin layer is at least one of a polyester resin layer or a polypropylene resin layer.” In the rejection, the Examiner cites to Goeb’s abstract as disclosing this feature. However, while the abstract provides that the halogen-free acrylic sheet material is manufactured from a polymer comprising an aliphatic polyester diol, the halogen-free acrylic sheet material 10, itself, is not either a polyester resin layer or a polypropylene resin layer.

Thus, Applicants submit claim 18 is patentably distinguishable over Goeb for at least this reason.

**Claim Rejections - 35 U.S.C. § 103**

The Examiner rejected claims 1, 3, 5-8, 16 and 17 under § 103(a) as being unpatentable over Hughes (US 6,169,266) in view of Ward et al. (US 2,192,423), in further view of Sonobe (US 6,244,176).

Hughes relates to a method of etching multilayer coated surfaces using a laser to add graphics and text to a coated article. Hughes discloses coating an article with at least two layers, an overcoat layer 26 and an undercoat layer 24. (col. 8, lines 12-15). These layers are of different colors to provide a contrast in order to facilitate reading of the graphics and text etched into the layers. (col. 8, lines 40-43). Finally, Hughes discloses that an additional exterior layer made of a protective material would be acceptable. (col. 11, lines 59-67).

Ward et al. relates to a standard paper bag for packaging a product that is covered by strips of material C-C' to conceal the identity of the package. (p. 2, lines 37-60, right column) (*see* FIG. 6). These strips of material C-C' may be made of paper.

Sonobe relates to a printing apparatus for printing to a medium by transferring colored ink to an endless elastic blanket.

In the rejection, the Examiner contends that Hughes teaches a method of forming a display which could inherently be used as a display of a packaging case, but concedes that Hughes is silent with regard to a paper sheet or that the ink is paint or a resin. To compensate for these deficiencies of Hughes, the Examiner applies Ward to teaching a paper sheet and Sonobe as teaching an ink formed from monomers and oligomers, which the Examiner interprets as a resin. Further, the Examiner alleges it would have been *prima facie* obvious to one of ordinary skill to incorporate the method of Ward and Sonobe into that of Hughes because:

- a) Ward suggests ornamentation, which Hughes provides;
- b) Hughes suggests the method for any article where a design or indicia is required, which Ward provides;
- c) the paper substrate of Ward would provide a reinforcing layer to the invention of Hughes;
- d) Hughes suggests wear resistance inks and the thermosetting inks of Sonobe could be substituted for the ink of Hughes to provide to provide a predictable result.

In contrast, Applicants submit the Examiner has misinterpreted Sonobe, and thus, even if the references are combined as suggested, the suggested combination fails to disclose, "a paper

sheet having a colored layer constituted by a coloring agent and a resin film layer for protecting the front face on the front face,” as recited in claim 1.

In particular, Sonobe merely discloses that an ultraviolet ink used in one embodiment may contain an acryl ester type monomer or oligomer as a vehicle. (col. 5, lines 10-22 of Sonobe). Applicants submit this fails to disclose the use of a resin material. Consequently, because neither Hughes nor Ward teach using a resin film layer, even if combined with Sonobe, the applied combination fails to disclose a resin film layer as recited in claim 1.

Thus, Applicants submit claim 1 is patentably distinguishable over the applied combination for at least this reason. Additionally, Applicants submit claims 3, 5-8, 16 and 17 are patentably distinguishable, at least by virtue of their dependency.

**Claim Rejections - 35 U.S.C. § 103**

The Examiner rejected claim 18-23 as being unpatentable over Hughes (US 6,169,266) in view of Ward (US 2,192,423), and in further view of Cicci (US 4,836,102).

In the rejection, the Examiner applies Hughes and Ward in the same manner as applied to claim 1 above. However, the Examiner concedes that neither Hughes nor Ward disclose that the ink is a polyester or polypropylene resin. To compensate for this deficiency, the Examiner applies Cicci alleging it discloses polyester resin inks. As a reason to combine, the Examiner seems to allege that because Cicci teaches its inks are suggested for a multilayer ink design, one of ordinary skill in the art would combine them with Hughes and Ward.

In response, Applicants submit that one of ordinary skill in the art would not combine Cicci with Hughes as suggested by the Examiner. Specifically, Hughes is directed to a method of incorporating graphic and textual elements on a surface of an article via etching of a

multilayered surface. (col. 1, lines 6-10). Further, Hughes teaches away from using direct printing processes which are more susceptible to damage and wear. (col. 4, lines 30-33). As a reason for combining Hughes with Cicci, the Examiner contends the method of Cicci is suggested for a multilayered ink design.

However, the Examiner's premise here ignores the fact that the reason for using an unsaturated polyester resin, as taught by Cicci, is for its oxygen inhibiting characteristic. (col 3, lines 30-36). But in contrast to the purpose of Hughes, these oxygen inhibiting characteristics are used to provide benefits in the specific configuration of a conventional printing process. Specifically, Cicci provides a method wherein ink in a desired pattern is transferred from an inked surface 2 of a printing plate 1 to a low energy surface 5 of an ink transfer print pad 6. Notably, the invention requires that the ink at the interface between the ink layer and the ink transfer pad 6 be cured to a greater extent than the ink at the outer layer to result in a reduction of the adhesion of the ink layer to the ink transfer print pad to permit a release of the ink. (col. 2, lines 46-66). Consequently, if the unsaturated polyester resins are used, their oxygen inhibiting characteristics prevent the curing of the outer layer, such that the inner layer is cured to a higher degree. Therefore, the reason for using the unsaturated polyester resin in Cicci, is to permit the release of the ink from the ink transfer pad in a conventional printing process.

In conclusion, the purpose underlying the use of a unsaturated polyester resin is for the release of ink in a conventional printing process. Because Hughes teaches away from such a conventional printing process, Applicants submit that the Examiner has failed to establish *prima facie* obviousness because one of ordinary skill in the art would not combine Hughes and Cicci as suggested by the Examiner.

Thus, Applicants submit claims 18-23 are allowable for at least this reason.

**New Claims**

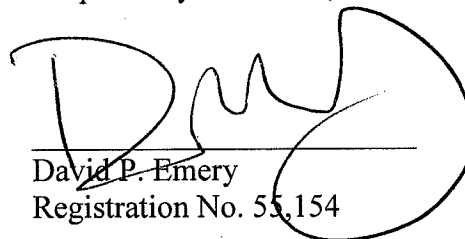
New claims 24 and 25 are hereby added by this Amendment and submitted to be allowable at least by virtue of their dependency.

**Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

  
David P. Emery  
Registration No. 55,154

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

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